

Newcastle-on-Tyne 97140

No. 20590

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Writing Report 13.6.38 When handed in at Local Office 13.6.38 Port of Grimsby
 Survey held at Lincoln Date, First Survey 24.6.37 Last Survey 3rd June 1938
 Number of Visits 15

Single on the Twin Triple Quadruple } Screw vessel
 Tons { Gross 27155
 Net 15813

at Newcastle By whom built Swan, Hunter & Wigham Richardson Yard No. 1547 When built
 Port belonging to

Engines made at Lincoln By whom made Ruston & Hornsby, Ltd ENGINE Contract No. 186122 When made 1937
 Motors made at Sunderland By whom made Sunderland Forge & Engineering Co., Ltd GENERATOR Contract No. F5777 When made 1937

Sets / Engine Brake Horse Power 150 Nom. Horse Power as per Rule 31 Total Capacity of Generators 100 Kilowatts.

ENGINES, &c.—Type of Engines 5 VCRZ - Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single
 Steam pressure in cylinders 400 Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 5 No. of cranks 5
 Bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/8" Is there a bearing between each crank Yes

Revolutions per minute 600 Flywheel dia. 3'-4" Weight 17 1/2 tons Means of ignition Compression Kind of fuel used Heavy oil
 Main Shaft, dia. of journals as per Rule Approved Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis shrunk
 as fitted 6" Mid. length thickness 2 1/2" Thickness around eyehole

Intermediate Shafts, diameter as per Rule Approved as fitted 6" Thickness of cylinder liners 3/4"
 Governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced

Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Water cooled.

Number of Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Lubricating Oil Pumps, No. and size One, geared

Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
 Suctioning Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
 Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Removal of sludging
 Is there a drain arrangement fitted at the lowest part of each receiver Yes

Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
 Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓
 Suctioning Air Receivers, No. One Total cubic capacity 11.2 Cub. ft. Internal diameter 2 1/8" thickness 5/16"
 Material Seamless Steel Range of tensile strength 26/30 tons Working pressure by Rules Approved.

ELECTRIC GENERATORS:—Type Open
 Voltage of supply 220 volts. Load 455 Amperes. Direct or Alternating Current Direct
 Alternating current system, state frequency of periods per second ✓

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Yes
 Do the generators, do they comply with the requirements regarding rating Yes are they compound wound Yes
 Are they over compounded 5 per cent. ✓, if not compound wound state distance between each generator

Are adjustable regulating resistance fitted in series with each shunt field ✓ Are all terminals accessible, clearly marked, and furnished with sockets Yes
 Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule ✓

Are approved plans forwarded herewith for Shafting 11.11.32 Receivers 7.11.34 Separate Tanks 14.9.37
 (If not, state date of approval)

RE GEAR

As per Rule requirements.

The foregoing is a correct description,

E. L. Lough

Manufacturer.



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Lloyd's Register Foundation

002942-00 5-0214

20389

Dates of Survey while building { During progress of work in shops - - 1937 Jan 24 Jul 8 12 20 Aug 9 24 Sep 16 20 27 Oct 7 14 Dec 14 1938 May 19 23 Jun 3 40
During erection on board vessel - - -
Total No. of visits 15

Dates of Examination of principal parts—Cylinders 14-10-37-23-5-38 Covers 14-10-37, 23-5-38 Pistons 14-10-37, 23-5-38 Piston rods ✓

Connecting rods 14-10-37, 23-5-38 Crank and Flywheel shaft 16-9-37, 23-5-38 Intermediate shaft ✓

Crank and Flywheel shafts, Material Steel Identification Mark LLOYD'S 3351-16-9-37 AS

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case Yes If so, state name of vessel Gun Rpt 20365

General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine has been built under special survey in accordance with the Rules and approved plans.

The workmanship and materials are good

Running tests have been carried out at the Makers works with satisfactory results.

The engine has been despatched to Newcastle to the order of Messrs Swan, Hilliker & Wigham Richardson, for fitting on board the vessel.

(Grimsby Rpt 20389)

Note: This engine was reported on the 15th December, 1937, and has now been fitted on a new base & coupled to a 100 Kw generator.

Running tests have again been carried out & the engine subsequently opened up and examined with satisfactory results.

This Auxiliary Oil Engine Dyno Set for Emergency Lighting has been satisfactory fitted in its engine Room on "Sports" Deck of the M.V. DOMINION MONARCH. & tested under working conditions

A Watt
Newcastle on Dyno
27/1/39

94206/P/IV.8968
- 37/IV.1730.

Engine fee charged on
The amount of fee Grimsby Rpt: 20389
See for alterations & running tests
Travelling Expenses (if any) £ 2 2 -

When applied for,
13/6/38

When received,
14/6/38

Challis

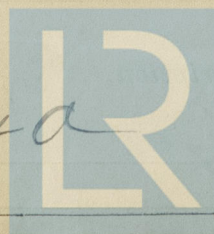
Surveyor to Lloyd's Register of Shipping.

TUE. 14 FEB 1939

Committee's Minute

Assigned

See Nova J.E 97140



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